SunLong Biotech Co.,LTD
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Rabbit Anti-RAB3GAP2 antibody

SL11939R

Product Name	RAB3GAP2
Chinese Name	RAB3-GTP 酶激活蛋白催化亚单位 2 抗体
Alias	DKFZp434D245; FLJ14579; KIAA0839; p150; Rab3 GAP p150; Rab3 GAP regulatory subunit; Rab3 GAP150; Rab3 GTPase activating protein 150 kDa subunit; Rab3 GTPase activating protein non catalytic subunit; RAB3 GTPase activating protein subunit 2 (non catalytic); RAB3 GTPase activating protein subunit 2; RAB3GAP150; RGAP iso; RP11 568G11.1; RBGPR_HUMAN.
Research Area	Cell biology Developmental biology Neurobiology Signal transduction G protein signal
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted: Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Sheep,)
Applications	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	156kDa
Cellular localization	cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human RAB3GAP2: 741-850/1393
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or

diagnostic applications.

PubMed PubMed

ab 3 GAP p150 is a ubiquitously expressed protein that contains 1,393 amino acids and belongs to the Rab3-GAP regulatory subunit family. Defects in Rab 3 GAP p150 are the cause of Martsolf and Warburg Micro syndrome. Both syndromes are characterized by congenital cataracts, microphthalmia, postnatal microcephaly and developmental delay, and are inherited in an autosomal recessive manner. The Rab3 GTPase-activating complex is a heterodimer composed of RAB3GAP and Rab 3 GAP p150 that interacts with DMXL2. Existing as two alternatively spliced isoforms, the Rab 3 GAP p150 gene is conserved in chimpanzee, dog, cow, rat, chicken, zebrafish, fruit fly, mosquito, A.thaliana and rice. The Rab 3 GAP p150 gene contains 36 exons and maps to human chromosome 1q41.

Function:
RAB3GAP2 is a regulatory subunit of a GTPase activating protein that has specificity for Rab3 subfamily (RAB3A, RAB3B, RAB3C and RAB3D). Rab3 proteins are involved in regulated exocytosis of neurotransmitters and hormones. Rab3 GTPase-activating complex specifically converts active Rab3-GTP to the inactive form Rab3-GDP. It is required for normal eye and brain development and may participate in neurodevelopmental processes such as proliferation, migration and differentiation before synapse formation, and non-synaptic vesicular release of neurotransmitters.

Product Detail

Subunit:
The Rab3 GTPase-activating complex is a heterodimer composed of RAB3GAP and RAB3-GAP150. The Rab3 GTPase-activating complex interacts with DMXL2

Subcellular Location:
Cytoplasm. Note=In neurons, it is enriched in the synaptic soluble fraction.

Tissue Specificity:
Ubiquitous.

DISEASE:
efects in RAB3GAP2 are the cause of Martsolf syndrome (MARTS) [MIM:212720]. Martsolf syndrome is characterized by congenital cataracts, mental retardation, and hypogonadism. Inheritance is autosomal recessive.
Defects in RAB3GAP2 are the cause of Warburg micro syndrome type 2 (WARBM2) [MIM:614225]. WARBM2 is a rare syndrome characterized by microcephaly, microphthalmia, microcornia, congenital cataracts, optic atrophy, cortical dysplasia, in particular corpus callosum hypoplasia, severe mental retardation, spastic diplegia, and hypogonadism.

Similarity:
Belongs to the Rab3-GAP regulatory subunit family.

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SWISS:
Q9H2M9

Gene ID:
25782

Database links:

Entrez Gene: 25782 Human

Entrez Gene: 98732 Mouse

Entrez Gene: 289350 Rat

Omim: 609275 Human

SwissProt: Q9H2M9 Human

SwissProt: Q8BMG7 Mouse

SwissProt: Q5U1Z0 Rat